

#11

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Michael J. Heller
Eugene Tu
Glen A. Evans
Ronald G. Sosnowski

(ii) TITLE OF INVENTION: SELF-ADDRESSABLE
SELF-ASSEMBLING
DEVICES FOR
AND
DIAGNOSTICS
MICROELECTRONIC SYSTEMS AND
MOLECULAR BIOLOGICAL ANALYSIS

(iii) NUMBER OF SEQUENCES: 44

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Lyon & Lyon
(B) STREET: 633 West Fifth Street
(C) CITY: Los Angeles
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 90071

(v) COMPUTER READABLE FORM:

storage (A) MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
(B) COMPUTER: IBM Compatible
(C) OPERATING SYSTEM: IBM P.C. DOS (Version
5.0) (D) SOFTWARE: WordPerfect (Version
5.1)

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 08/271,882
(B) FILING DATE: July 7, 1994
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/146,504
(B) FILING DATE: November 1, 1993

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Murphy, David B.
(B) REGISTRATION NUMBER: 31,125

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09104103

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (213) 489-1600
(B) TELEFAX: (213) 955-0440
(C) TELEX: 67-3510

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

```

acid      (A) LENGTH:                24
          (B) TYPE:                nucleic
          (C) STRANDEDNESS:        single
          (D) TOPOLOGY:            linear

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(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

GCT AGC CCC TGC TCA TGA GTC TCU 24

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	24
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

AAA AAA AAA AAA AAA AAA AAU 24

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:

acid

(A) LENGTH:	34
(B) TYPE:	nucleic
(C) STRANDEDNESS:	single
(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

CTA CGT GGA CCT GGA GAG GAA GGA GAC TGC CTG U 34

06914-10101

acid

20
nucleic

single
linear

GAG TTC AGC AAA TTT GGA GU

20

acid

```
(A) LENGTH:                20
(B) TYPE:                   nucleic

(C) STRANDEDNESS:          single
(D) TOPOLOGY:              linear
```

20
nucleic
single
linear

CGT AGA ACT CCT CAT CTC CU

20

acid

```
(A) LENGTH: 18
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

18
nucleic

single
linear

GTC TCC TTC CTC TCC AGU

18

acid

```
(A) LENGTH:                20
(B) TYPE:                  nucleic

(C) STRANDEDNESS:          single
(D) TOPOLOGY:              linear
```

20
nucleic

single
linear

[illegible]

20

acid

(A) LENGTH:

(B) TYPE:

18

nucleic

(C) STRANDEDNESS:

single

(D) TOPOLOGY:

linear

18

acid

(A) LENGTH:

(B) TYPE:

22

nucleic

(C) STRANDEDNESS:

single

(D) TOPOLOGY:

linear

22

acid

(A) LENGTH:

(B) TYPE:

20

nucleic

(C) STRANDEDNESS:

single

(D) TOPOLOGY:

linear

20

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 20
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

TGT TTG CCT GTT CTC AGA CU 20

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 20
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

CAT CGC TGT GAC AAA ACA TU 20

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 20
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

TGC GAG CTG CAG TCA GAC AT 20

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 18
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

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(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

GAG AGA CTC ATG AGC AGG

18

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	18
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

CCT GCT CAT GAG TCT CTC

18

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	19
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

TTT TTT TTT TTT TTT TTT T

19

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	33
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

CAG GCA GTC TCC TTC CTC TCC AGG TCC ACG TAG

33

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS:

00012014-100101

acid (A) LENGTH: 19
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

CTC CAA ATT TGC TGA ACT C

19

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 19
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

GGA GAT GAG GAG TTC TAC G

19

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 17
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

CTG GAG AGG AAG GAG AC

17

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 19
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

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19

(i) SEQUENCE CHARACTERISTICS:

acid

17

(i) SEQUENCE CHARACTERISTICS:

acid

21

(i) SEQUENCE CHARACTERISTICS:

acid

19

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 19
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

GTC TGA GAA CAG GCA AAC A 19

(2) INFORMATION FOR SEQ ID NO: 26:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 19
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

ATG TTT TGT CAC AGC GAT G 19

(2) INFORMATION FOR SEQ ID NO: 27:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 30
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

GGT GGT GGG CGC CGG CGG TGT GGG CAA GAU 30

(2) INFORMATION FOR SEQ ID NO: 28:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 30
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

0912014 100101

GGT GGT GGG CGC CGT CGG TGT GGG CAA GAU

30

(2) INFORMATION FOR SEQ ID NO: 29:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	15
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

CC GCG GCC GCC ACA C 15

(2) INFORMATION FOR SEQ ID NO: 30:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	15
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

CC GCG GCA GCC ACA C 15

(2) INFORMATION FOR SEQ ID NO: 31:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	15
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

CC GTG GCA GCC ACA C 15

(2) INFORMATION FOR SEQ ID NO: 32:

(i) SEQUENCE CHARACTERISTICS:

091204-1016

TD000T-4T02T500

acid (A) LENGTH: 30
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

GGT GGT GGG CGC CGG CGG TGT GGG CAA GAU 30

(2) INFORMATION FOR SEQ ID NO: 33:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 29
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

GGT GGT GGG CGC CGG CGG TGT GGG CAA GA 29

(2) INFORMATION FOR SEQ ID NO: 34:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 22
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

TGC CCA CAC CGC CGG CGC CCA C 22

(2) INFORMATION FOR SEQ ID NO: 35:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 22
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

TGC CCA CAC CGA CGG CGC CCA C

22

(2) INFORMATION FOR SEQ ID NO: 36:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 22
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

TGC CCA CAC CGA CGG TGC CCA C

22

(2) INFORMATION FOR SEQ ID NO: 37:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 7
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

ACA CCG C

7

(2) INFORMATION FOR SEQ ID NO: 38:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 7
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

ACA ACG C

7

(2) INFORMATION FOR SEQ ID NO: 39:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 31

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acid (B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

CCA GTC ACG ACG TTG TAA AAC GAC GGC CAG U 31

(2) INFORMATION FOR SEQ ID NO: 40:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 31
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 40:

GTA ATC ATG GTC ATA GCT GTT TCC TGT GTG U 31

(2) INFORMATION FOR SEQ ID NO: 41:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 40
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 41:

GCA TGC CTG CAG GTC GAC TCT AGA GGA TCC CCG GGT ACC G 40

(2) INFORMATION FOR SEQ ID NO: 42:

(i) SEQUENCE CHARACTERISTICS:

acid (A) LENGTH: 40
(B) TYPE: nucleic
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 42:

TGC CAA GCT TGG CTG CAG GTC GAC GGA TCC CCG GGA ATT C 40

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(2) INFORMATION FOR SEQ ID NO: 43:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	24
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 43:

AAA TTG TTA TCC GCT CAC AAT TGC 24

(2) INFORMATION FOR SEQ ID NO: 44:

(i) SEQUENCE CHARACTERISTICS:

acid	(A) LENGTH:	24
	(B) TYPE:	nucleic
	(C) STRANDEDNESS:	single
	(D) TOPOLOGY:	linear

(ii) SEQUENCE DESCRIPTION: SEQ ID NO: 44:

ACA CAA CAT ACG AGC CGG AAG CAT 24

FOOT"47021550